



# Plant Exploration

Program investigates the diversity of plants within Olympic National Park as well as the basics of plant reproduction. Through guided and unguided observations, students will increase their understanding of the plants of the Pacific Northwest, understand how scientists use a variety of tools and equipment to assist with the scientific process, as well as realize that the scientific method begins with observations and questioning. Program runs approximately 3.5 hours and occurs both inside and out.

**Activities:** Nature hike along the Living Forest Trail, Plant investigations with video microscope, and indoor or outdoor scavenger hunt.

**Theme:** Olympic National Park is home to great diversity plants, which are competing to disseminate and reproduce.

**Goals:** At the end of the program students will...

1. Understand the basics of the scientific method (making observations and asking testable questions.
2. Learn that the forests consists of a large diversity of plants
3. Know that plants reproduce differently
4. Understand how tools help scientist expand their observation skills

**Objectives:** At the end of the program students will...

1. Record three observations about the plants along the Living Forest Trail
2. Identify two different plants
3. Draw, list, and explain detailed observations
4. Record three detailed observations about plants of Olympic
5. Describe ways seeds and spores are dispersed
6. Describe the difference between seed and spore
7. Use a scientific tool to assist in making observations
8. Have fun experience in a National Park

## State Standards (EALRS Grade 2-3 Science)

- Systems

SYSE Similar parts may play different roles in different objects, plants, or animals.

- Inquiry

INQA —Question— Scientific *investigations* are *designed* to gain knowledge about the *natural world*.

INQB —Investigate— A scientific *investigation* may include making and following a plan to accurately observe and *describe* objects, events, and *organisms*; make and record measurements, and *predict* outcomes.

INQD —Investigate— Simple instruments, such as *magnifiers*, *thermometers*, and rulers provide more information than scientists can obtain using only their unaided senses.

Explain— Scientists develop explanations, using *observations (evidence)* and what they already know about the world. Explanations should be based on *evidence* from *investigations*.

- Life Science

LS1A Plants have *life cycles* that include sprouting, growing to full size, forming fruits and flowers, shedding seeds (which begins a new cycle), and eventually dying. The details of the *life cycle* are different for different plants.

LS3C Sometimes differences in *characteristics* give individual plants or animals an advantage in surviving and reproducing.

### **Sample Schedule**

(program can be tailored to address your needs)

**08:00** Arrival and welcome in the Visitor Center auditorium. Separate into three groups.

**08:15** Begin first station (Nature Hike)

**09:05** Rotate and second station (Microscope Investigations)

**09:55 - 10:15** Snack and restroom break

**10:20 – 11:05** Third and final station (Seed activity)

**11:10 – 11:20** Summary and closing